

UNITED STATES DISTRICT COURT
DISTRICT OF MASSACHUSETTS

CIVIL ACTION NO. 04-10480-RGS

SILAS CALHOUN and
EMILY CALHOUN, Individually and
as Parents and Next Friends of
ESTELLA CALHOUN

v.

UNITED STATES OF AMERICA

FINDINGS OF FACT AND RULINGS OF LAW
AFTER A NON-JURY TRIAL

March 25, 2008

STEARNS, D.J.

Estella Calhoun, the first-born child of plaintiffs Silas and Emily Calhoun,¹ became severely dehydrated soon after her birth. Despite a seemingly successful pediatric intervention, she suffered a series of cerebrovascular spasms. These left a permanent lesion in the right thalamus region of her brain. The Calhouns contend that as Estella grew older, she began to manifest cognitive and behavioral difficulties, including Attention Deficit Hyperactivity Disorder (ADHD), which they attribute to the brain injuries. On March 9, 2004, the Calhouns filed this Federal Tort Claims Act (FTCA) lawsuit against Estella's primary physician, Dr. (Captain) Eric Daub, alleging medical malpractice. Dr. Daub was an Air Force physician assigned to the Hanscom Clinic (Clinic) at Hanscom Air Force Base in Bedford, Massachusetts. The United States was therefore substituted as the named

¹Individually and as next friends of Estella. The individual claims are based on a loss of consortium.

defendant.² A trial without jury was held in April of 2007.³ After the taking of evidence, the parties were given leave to file proposed findings of fact and rulings of law. They did so in September of 2007. The court then heard final argument.

FINDINGS OF FACT

The court makes the following findings of fact based on the credible evidence offered at trial.

1. Silas Calhoun is a Captain in the United States Army Signal Corps.⁴ In February of 2000, Captain Calhoun was serving a tour of duty in Korea, while his wife, Emily Calhoun, remained in Massachusetts. Emily was awaiting the birth of the couple's first child.⁵

2. On February 25, 2000, after an uneventful pregnancy, Emily⁶ gave birth to Estella at the Beth Israel Deaconess Medical Center (Beth Israel) in Boston, Massachusetts. Estella was born at full-term gestation (37.6 weeks). Estella weighed 8 pounds, 13 ounces

²The FTCA, 28 U.S.C. §§ 2671 *et seq.*, makes an action against the United States the exclusive remedy for a “negligent or wrongful act or omission” of a federal employee acting within the scope of his or her employment. United States v. Smith, 499 U.S. 160, 165-167 (1991). The FTCA requires that the named defendant be the United States and the United States alone. See Roman v. Townsend, 224 F.3d 24, 27 (1st Cir. 2000). Although the original Complaint named Dr. Daub individually, plaintiffs agreed to his voluntary dismissal upon the substitution of the United States as the defendant.

³The trial was heard on an expedited basis while the court was sitting in Springfield, Massachusetts, to permit Captain Calhoun's attendance before his deployment to Iraq.

⁴At the time of Estella's birth, Captain Calhoun held the rank of First Lieutenant.

⁵The Army does not station families of service members in Korea because of the ongoing state of hostilities with North Korea.

⁶For the sake of clarity, the court will use Emily's first name to distinguish her from Estella. It does not by doing so intend any disrespect.

at birth. She was by all indications a healthy baby.

3. Estella developed normally while her mother recuperated at Beth Israel. She was noted to be "nursing well with minimal assistance." On February 25, 2000, Estella passed two meconium stools.⁷ On February 26, 2000, Estella passed five meconium stools. Also on that date, Captain Calhoun returned from Korea. On the morning of February 27, 2000, prior to being discharged from Beth Israel, Estella passed two meconium stools. She then weighed 8 pounds, 8 ounces.⁸ In discharging Emily, Beth Israel recommended that Estella be seen at the Hanscom Clinic within one to two weeks.

4. On February 28, 2000, the first full day home for mother and child, Emily became concerned that Estella did not appear to be breast-feeding properly. Estella also had not stooled since leaving the hospital. Emily made an appointment at the Clinic for the following day.

5. On February 29, 2000,⁹ Emily and Captain Calhoun brought Estella to the Clinic. The medical technician on duty, Airman Paul Best, took Estella's vital signs. He noted her temperature as a normal 97.2 degrees, and recorded her weight as 8 pounds, 13 ounces (the same as her birthweight). Emily testified that Estella was fully garbed when Best weighed her: that she had on a baby hat, a onesie, a baby gown, a baby sack, a diaper,

⁷Meconium is the dark, tarry stool in a newborn's colon that is comprised of digested amniotic fluid swallowed by the baby *in utero*. The meconium will typically be passed in the first one to two days if a newborn is breast-feeding successfully.

⁸Both plaintiffs' and defendant's experts agreed that all babies in the normal course of development lose an appreciable amount of their birthweight (as much as 10 percent) during the first week.

⁹The year 2000 was a Leap Year.

booties, and two blankets. Captain Calhoun testified that Best lifted Estella out of her car seat and placed her on the scale, fully clothed. Best, in a deposition, recalled that Estella had presented at the Clinic wearing a yellow onesie and a yellow blanket. He testified that Clinic procedure required that all newborns be weighed completely undressed. He also testified that in some circumstances, when it was cold and parents objected to their babies being undressed, his practice was to weigh a baby fully clothed. Best did not specify whether this was the case with Estella. Rather, when asked if he had told the Calhouns that Estella would have to be fully undressed before being weighed, Best responded, "To the best of my recollection, I would say yes."

6. Dr. Daub, who had been randomly assigned as Estella's physician, saw her shortly after the intake examination.¹⁰ Dr. Daub was a family practitioner and recent medical graduate with one and one-half years of solo experience. He made note of Best's report of Estella's weight. He also noted (without remark) that her weight upon discharge from Beth Israel had been 8 pounds, 8 ounces, that is, 5 ounces less than the weight recorded by Best. Dr. Daub wrote that Estella was awake, alert, and that her vital signs were stable. From the Calhouns, he learned that Estella was "only having wet diapers," and had not had a bowel movement in three days. He additionally noted that Estella appeared to have signs of jaundice, and that her skin was "loose." He ordered a bilirubin test¹¹ and an analysis of Estella's complete blood count (CBC). He recommended that

¹⁰Dr. Daub died prior to the trial and before any opportunity to preserve his testimony.

¹¹Bilirubin is a by-product of the breakdown of hemoglobin. Because a newborn baby's liver is not yet functioning on its own, it cannot metabolize blood. The result is a detectable surplus of red blood cells.

Emily expose Estella to indirect sunlight and return for a follow-up examination on March 2, 2000.

7. Later that afternoon (February 29), Dr. Daub received the results of the CBC and bilirubin tests. Estella's hematocrit was in the normal range.¹² However, because her bilirubin level was high – 19.1 – Dr. Daub spoke with Emily and asked her to bring Estella to the Clinic the following day (March 1), rather than waiting for the appointment on March 2.

8. The technician on duty on March 1, 2000, Airman Van Hoang, took Estella's vital signs before the appointment with Dr. Daub. Hoang recorded Estella's weight as 8 pounds, 2 ounces (11 ounces less than her birthweight, and 6 ounces less than her discharge weight upon discharge from Beth Israel). Emily and Captain Calhoun testified that Estella was again weighed fully clothed. (Emily testified that Estella was wearing a hat, a onesie, a baby gown, diaper, and socks, and was possibly wrapped in a blanket). Hoang testified that he did not specifically recall weighing Estella, but that he always weighed babies unclothed, as Clinic procedure required, even when parents complained that the intake room was too cold.¹³

¹²The government's expert, Dr. Steven Ringer, explained that hematocrit is a function of the percentage of blood made up of red blood cells. It is a marker of dehydration. As blood becomes more concentrated, water in the blood is eliminated, and the hematocrit level rises.

¹³While I credit the Calhouns' testimony regarding the weighing by Best, I believe that the Calhouns have conflated the events of the first and second visits. The weight reported by Best, both plaintiffs' expert (Dr. Marlene Jacqueline Wust-Smith) and defendant's expert (Dr. Ringer) agreed was impossible, given the weight loss experienced by all babies post-partum. The weight reported by Hoang, on the other hand, is consistent with a newborn's expected weight loss. Either Best weighed Estella without removing her clothing, as Emily and Captain Calhoun testified (accurately, I believe was the case), or he

9. In his notes of the March 1, 2000 visit, Dr. Daub recorded the Calhouns' report that Estella "has done quite well overnight. 3 stools, voiding frequently, feeding vigorously," and noted that "her parents feel that she is less jaundiced."¹⁴ He observed that Estella's "weight today is down some." He also remarked that Estella was "comfortable, in NAD [no apparent distress], [and was] asleep when I examined her." Dr. Daub observed less jaundice in Estella's hands, feet, forearms, and legs. Test results indicated that the bilirubin level had dropped to an encouraging 18.1.¹⁵ Dr. Daub's plan for treatment was to "insure that the bilirubin continues to fall" by scheduling a follow-up appointment in two day's time. Dr. Daub instructed the Calhouns to return sooner if Estella "is worsening or not improving."

9. Over the next day, March 2, 2000, Emily observed that Estella was crying excessively and breast-feeding only in short intervals. She became drowsy and was sleeping longer without waking to feed. Emily testified that she was concerned, but felt reassured by Dr. Daub's statement that Estella's bilirubin level was improving.

11. On March 3, 2000, the Calhouns returned to the Clinic for the scheduled appointment with Dr. Daub. He noted that "[Estella's] parents reported that she has not been eating last day and is not interested in suckling." Dr. Daub also wrote that Estella was "somnolent, skin is loose on her, weight is down nearly one lb." Estella's weight on intake was 7 pounds, 4 ounces, that is, 14 ounces less than the weight recorded by Airman Hoang

mistakenly wrote down Estella's birthweight instead of her actual weight (which is possible given the fact that the two weights are identical) – or he did both.

¹⁴Emily testified that Estella had passed one meconium stool, not three as reported by Dr. Daub.

¹⁵Dr. Daub specifically wrote "initial hyperbilirubinemia in a breast-fed baby, bilirubin is dropping."

on March 1.¹⁶ Her temperature was an elevated 100.2 degrees. The bilirubin level, however, had receded to a level of 15.

12. Dr. Daub ordered Estella's immediate transfer to the pediatrics service at Emerson Hospital in Concord, Massachusetts. His referral note indicated that "neonatal hyperbilirubinemia was resolving, but now not feeding and has 1 lb. weight loss, please rule out sepsis and re-evaluate bilirubin."¹⁷

13. On arrival at Emerson Hospital, Estella was examined by Dr. Marianne Sutton.¹⁸ She noted that Estella "appeared jaundiced and that her anterior fontanel, which is her soft spot, was very sunken. Her lips were very dry, her skin turgor was poor, and she was markedly dehydrated even on physical examination."

14. The Emerson Hospital records indicate that Estella had an elevated serum sodium level of 172 (the upper acceptable limit is 145). Her weight was recorded as 7 pounds, 1/2 ounce.¹⁹

15. Estella was diagnosed with severe hypernatemic dehydration.²⁰

¹⁶Emily testified that she did not remember anything about Estella's weighing on intake that morning. When asked to elaborate, she stated that Estella was not fully naked when weighed. However, she could not remember what Estella was wearing.

¹⁷Sepsis is an infection in the blood stream.

¹⁸Dr. Sutton was originally named by the Calhouns as a defendant, but on April 10, 2006, was voluntarily dismissed from the complaint.

¹⁹This reflects a drop of 3 1/2 ounces between the time Estella was admitted to the Clinic and the time her vital signs were taken at Emerson Hospital, four hours later, reflecting perhaps a difference in the scales used combined with the continued progression of Estella's dehydration.

²⁰According to the testimony of plaintiffs' experts Dr. Edward Hart, a pediatric neurologist, and Dr. Wust-Smith, a pediatrician, hypernatemic dehydration results from a lack of sufficient fluid in the body, associated with a high level of sodium in the blood. To

16. Estella's sodium level was closely monitored as she was gradually rehydrated over several days during her stay at Emerson.²¹

17. On March 6, 2000, Estella was discharged from Emerson Hospital. She then weighed 8 pounds, 9 ounces. A post-discharge consultation with a lactation specialist and a checkup visit at the Clinic were scheduled for the Calhouns prior to the discharge.

18. On March 9, 2000, three days after her discharge from Emerson Hospital, Estella was seen at the Clinic by Dr. (Major) Russel T. Coleman. Estella's weight was now 8 pounds, 14½ ounces. During the visit, Emily reported having observed "occasional twitching" by Estella. Dr. Coleman's examination revealed an "occasional twitch of left ankle when crying." He explained to Emily that the twitching was normal in an infant, and compared it to the reflexive action that one makes if startled when asleep. Overall, Dr. Coleman found Estella to be a "well child," having an examination within normal limits and displaying no signs of jaundice. Dr. Coleman instructed Emily to follow-up in two weeks and to monitor Estella's weight at home, with an expectation of a ¾ to 1 ounce daily weight gain.

19. After Emily and Estella left the Clinic on March 9, 2000, Estella continued to twitch throughout the day and into the early evening. The twitching gradually spread over

counteract the high level of sodium, the body moves water from the cells into the bloodstream. During this process of osmotic shifting, cells shrink from water loss. This loss can lead to venous stasis, a condition in which the blood in the vessels does not circulate properly, leading to either intravascular bleeding or thromboses (clots), which in turn can lead to hemorrhaging.

²¹Dr. Sutton testified that it is crucial to rehydrate an infant slowly in order to prevent rapid intravascular fluid shifts. If the level of serum sodium rises too rapidly, there is a risk of intravascular bleeds and thromboses.

Estella's entire left side including her leg, arm, and eye. At approximately 9:00 p.m., the Calhouns took Estella to the Emergency Room at Children's Hospital (Children's) in Boston.

20. On admission to Children's, Estella was found to be suffering from multiple seizures. She had focal seizures of the left arm, face, and leg. The seizures were accompanied by multiple episodes of apnea (cessation of breathing). Estella was intubated and given Ativan and Phenobarbital to control the seizures. She was placed on a respirator to assist her breathing.

21. On March 10 and 11, 2000, a series of CT scans and MRIs were performed on Estella's brain. The tests revealed an extensive venous thrombosis involving the superior sagital sinus, straight sinus, internal cerebral veins, and right terminal vein; a hemorrhage in the posterior horn of the right lateral ventricle; and a punctuate lesion in the right thalamus.

22. On March 14, 2000, a follow-up MRI revealed that the venous thrombosis had progressed, but that the lesion in the right thalamus was stable.

23. The tests did not indicate any stroke, necrosis, or other extensive or permanent injury to Estella's brain.²²

24. On March 10, 2000, Dr. Andre du Plessis, the Director of the Fetal-Neonatal Neurology Program at Children's, diagnosed Estella as suffering from "neonatal encephalopathy with seizures of post-natal onset and associated with hypernatremic

²²Dr. Hart is of the opinion that because of the hypernatremic dehydration, it is likely that there were diffuse cellular defects and metabolic abnormalities that took place in Estella's brain, causing damage to nerve functioning despite the lack of any actual physical finding of an infarction (death of tissue) by the CT scans or MRIs.

dehydration." Dr. du Plessis told the Calhouns that Estella might have long-term issues, including learning disabilities, resulting from her brain injuries.

25. Estella was discharged from Children's on March 15, 2000. She was monitored by a pediatrician, by early intervention services, and by Dr. du Plessis on a periodic basis. Estella was taken off Phenobarbital in June of 2000.

26. Estella's pediatric records indicate that in the subsequent months, she met age-appropriate developmental milestones. None of her doctors noticed any abnormal neurological signs or symptoms. She began to walk at the age of ten months.

27. On March 28, 2001, when Estella was thirteen months old, Dr. du Plessis examined Estella. He noted that she had a "normal neurological examination except for very mild posturing of the left upper extremity with running and walking fast, that is likely the result of the right thalamic hemorrhage in the newborn period. Despite this, we do not feel that she has any significant clot at this point, especially one of any functional implication." Otherwise, Dr. du Plessis found Estella to be "advanced in achieving developmental milestones," including her gross motor skills. Based on his observations, Dr. du Plessis felt that it was no longer necessary for him to monitor Estella's progress.

28. Approximately seven months later, at age twenty months, Emily noticed that Estella was exhibiting an abnormally high level of energy. She was aggressive towards other children, and would hit them with objects and her bare hands. She ran everywhere, yelling and screaming. After her brother, Cy Henry, was born, Estella would try to pull him off people's laps, and once scratched his face with a fork.

29. Estella was enrolled in pre-school in September of 2002 at age two years and nine months. Her teacher was Emily's mother, Judith Birnim. At school, Estella was

impulsive and fidgety. She frequently chewed on her clothing and her hair. She was aggressive with classmates and difficult to discipline. At times, she became so upset that she would become physically ill.

30. Estella was evaluated by an early childhood education specialist in March of 2003. She was found to have difficulty modulating sensory input, which impacted her ability to attend to assigned tasks. Occupational therapy was recommended. A therapist at Children's evaluated Estella and noted that she demonstrated elevated tactile, auditory, visual, and olfactory sensitivities.

31. On March 26, 2003, Dr. du Plessis reexamined Estella. He noted that Estella had developed behavioral difficulties exhibiting aggression, impulsiveness, and emotional instability. He referred Estella to the Behavioral Neurology Department at Children's.

32. On April 28, 2003, Estella was evaluated by Dr. David Urion and Dr. Reet Sidhu. Dr. Urion noted Estella's prior brain injury, and in particular, the hemorrhage in her right thalamus. Doctors Urion and Sidhu jointly concluded: "At this point, [Estella] has several behavioral issues related to impulsivity, inattention, and hyperactivity that are often seen in children with this history of neurological injury."

33. In the summer of 2003, the Calhoun family relocated to Captain Calhoun's new duty station in Hawaii. Estella was evaluated by a team of specialists, including Dr. Megan Marumoto, a child psychiatrist. Dr. Marumoto observed Estella to be easily distracted and impulsive, and found that she exhibited symptoms of ADHD. Estella was placed in a special education pre-school class.

34. Over the next two years, Estella was often inattentive and restless in class. Although she responded well in highly structured environments, her teachers found her to

be a disruptive presence because of her uninhibited talking and giggling. In September of 2006, Estella entered the first grade. She was no longer in a special education class. Standardized test scores indicate that as of March of 2007, she was approximately one year behind her grade level in mathematics. Her reading skills, however, were improving with the assistance of a tutor.

35. Estella has been diagnosed with ADHD by several examiners, including plaintiffs' experts, Dr. Hart and Dr. Todd Elwyn, a child psychiatrist. The government's experts, Dr. Gregory Yim and Dr. Jefferson Prince, agree that Estella has mild ADHD. All of the experts are of the view (although to varying degrees) that Estella is experiencing, and may continue to experience, behavioral, cognitive, and developmental difficulties.²³ However, there is a dispute among the witnesses as to whether Estella's ADHD is causally related to the hypernatremic dehydration and cerebrovascular events that she suffered as a newborn.²⁴

²³Dr. Hart testified that when he interviewed Estella, he found her easily disinhibited, restless, and impatient. He also found her responses to be poorly modulated and at times oppositional. With the agreement of the parties, the court met with Estella in chambers in the presence of her parents, the attorneys, the clerk, and the court reporter. After some initial shyness at finding herself in a room filled mostly with strangers, Estella settled into easy conversation. I found her to be appropriately mature for her age, very engaging, and discriminating in her responses to my questions. She was able to clearly articulate the meaning of her name "Estella," of which she was visibly proud. She did not, as would many children in a similar environment, cling to her parents. I recognize that Dr. Hart's less positive observations are based on a formal examination as well as extensive clinical experience and training that the court lacks.

²⁴Dr. Hart testified that Estella's neurological insult was a substantial contributing factor to her current behavioral dysfunctions. According to Dr. Hart, the thalamus is a "central way station" in the brain, which is involved in programming and organizing behaviors. Dr. Hart believes that it was not the localized injury to the brain, but rather the ensuing encephalopathy that affected the "neuro-networks," or the brain circuitry which modulates Estella's behavior, that explains her behavioral and cognitive deficits. Similarly,

RULINGS OF LAW

1. Medical Malpractice

"The essence of the doctor-patient relationship is the undertaking by a physician to diagnose and/or treat the person being diagnosed or treated with reasonable professional skill." Lambley v. Kameny, 43 Mass.App.Ct. 277, 283 (1997). In order for a plaintiff to bring a malpractice action, she must first establish the existence of a physician-patient relationship. Coombes v. Florio, 450 Mass. 182, 186 (2007). Here, it is undisputed that such a relationship existed between Estella and Dr. Daub. The Calhouns must therefore show: (1) that Dr. Daub's treatment of Estella did not conform to accepted medical practice; and (2) that injury to Estella resulted from Dr. Daub's deviation from the duty of care. Perez v. Bay State Ambulance & Hosp. Rental Serv., Inc., 413 Mass. 670, 676

Dr. Elwyn testified that his review of the literature revealed that children who experienced intraventricular hemorrhage were at increased risk for ADHD, as the thalamus is involved in the neuro-circuitry that sustains attentiveness. Dr. Elwyn agreed that family parent/child dynamics may also play a role. Dr. Douglas Whiteside, a clinical neuropsychologist, testified that based on his review of the literature, Estella's early neurological injuries were a substantial contributing factor in slowing her cognitive development. Dr. Yim, a pediatric neurologist, testified for the government that the literature largely supports the hypothesis that there is no neurological sequelae associated with Estella's dehydration or cerebrovascular events. In Dr. Yim's opinion, if a neurological connection existed, obvious motor and/or sensory deficits would have exhibited themselves in the first year of Estella's life, and would have been identified by Dr. du Plessis. Dr. Prince, the government's pediatric psychiatry expert, testified that while he could not rule out a connection between the cerebrovascular events and Estella's current problems, a more plausible explanation is found in family and social factors and life stressors, such as Captain Calhoun's deployments to Korea and Iraq, the successive birth of several children (including twins) who competed with Estella for her parents' attention, and the frequent relocations of the family. Dr. Prince opined that if Estella's difficulties were attributable to her brain injury, her deficits would have manifested themselves closer in time to the event, and she would not have shown the periodic improvements that she has demonstrated. Because of the court's conclusion regarding liability, it is unnecessary to attempt to resolve this serious division in medical opinion.

(1992). In other words, to prevail, the Calhouns must first prove by a preponderance of the evidence that Dr. Daub was negligent in his treatment of Estella prior to her transfer to Emerson Hospital on March 3, 2000. They must then prove that Dr. Daub's negligence was a contributing cause of Estella's subsequent cerebrovascular injuries. Finally, they must prove that these injuries are a cause of Estella's behavioral disorders, including her ADHD.

2. Duty of Care

The relevant standard of care is "whether the physician, if a general practitioner, has exercised the degree of care and skill of the average qualified practitioner, taking into account the advances of the profession."²⁵ Brune v. Belinkoff, 354 Mass. 102, 109 (1968). By contrast, "[o]ne holding himself out as a specialist should be held to the standard of care and skill of the average member of the profession practising the specialty, taking into account the advances in the profession." Id. Dr. Daub was a family practitioner who, though he treated infants, did not hold himself out as a pediatrician. Therefore, the relevant inquiry is whether Dr. Daub met the prevailing standard of care in 2000 for a family practice physician. "The standard is measured against what a reasonably prudent practitioner in the defendant's position would do, not what any individual physician or physicians might

²⁵While the Calhouns argue that the relevant standard of care is that pertaining to a pediatrician (a specialist in the treatment of infants and children), the government argues that the relevant standard of care is that applicable to a general practitioner. (The court notes that the government's chief witness, Dr. Ringer, testified that Dr. Daub "met the accepted standard of care in 2000 for a family practice physician or pediatrician.") (emphasis added). Because the court is of the view that the standard to be applied is that pertaining to a general practitioner, it need not decide whether Dr. Ringer is correct as to Dr. Daub's compliance with both standards. It is of some significance that Dr. Daub, when he observed Estella's dramatic weight loss on March 3, 2000, did not attempt further treatment himself, but sought the immediate assistance of a pediatrician.

do." Palandjian v. Foster, 446 Mass. 100, 105 (2006), quoting 5 D.W. Louisell & H. Williams, Medical Malpractice § 29.01, at 29-7 (2005). Consistent with the testimony of Dr. Ringer, a pediatrician/neonatologist, and Dr. Wust-Smith, a pediatrician, the applicable standard of care required Dr. Daub to evaluate Estella following her birth for proper feeding, hydration, and stooling status, and for possible jaundice.

ULTIMATE CONCLUSIONS OF FACT AND LAW

1. Airman Best improperly weighed Estella at the intake examination on February 29, 2000, by not removing her clothing before taking her weight.
2. Dr. Daub's treatment of Estella on February 29, 2000, deviated from the applicable standard of care in failing to recognize that the weight reported by Airman Best was grossly inaccurate. In all other respects, Dr. Daub conformed to the applicable standard of care.²⁶
3. Airman Hoang's weighing of Estella at the intake examination on March 1, 2000, was performed properly and revealed a weight consistent with what would be expected in a five-day old infant.
4. Dr. Daub's treatment of Estella on March 1, 2000, conformed in all respects to the standard of care.²⁷

²⁶On his first examination of Estella, Dr. Daub appropriately investigated Estella's eating, stooling, and voiding habits, and examined her for signs of jaundice. He took detailed notes, ordered laboratory and blood tests, and scheduled a follow-up appointment to monitor what he feared might be signs of incipient jaundice.

²⁷Dr. Wust-Smith's opinion depends heavily on her conclusion that Dr. Daub deviated from the duty of care by failing to address Estella's 11 ounce drop in weight from February 29, 2000, to March 1, 2000. However, as Dr. Wust-Smith conceded in her testimony, the 11 ounce figure is valid only if one assumes that Airman Best's weighing of

5. There is no evidence that as of the time of the March 1, 2000 visit that Estella was suffering from abnormal dehydration.²⁸

6. The weight of the evidence is that the onset of dehydration (beyond what would normally be expected in a breast-fed infant) occurred after Estella's visit with Dr. Daub on March 1, 2000, and continued to worsen prior to the return visit on March 3, 2000.²⁹

7. Dr. Daub's treatment of Estella on March 3, 2000, and his decision to order her immediate transfer to Emerson Hospital, conformed to the proper standard of care.

8. The deviation by Dr. Daub on February 29, 2000, in failing to make note of the

Estella on February 29, 2000, was done properly. As Dr. Wust-Smith later testified, Estella's weight as reported by Airman Best on February 29 was unbelievably high and therefore unreliable.

²⁸On March 1, 2000, Estella appeared to be in improving health. The signs of jaundice had diminished as reflected in the drop in her bilirubin. Her hematocrit was in the normal range, indicating an absence of dehydration. Moreover, her skin was not noted to be loose, an improvement from the day before. Emily additionally reported to Dr. Daub that Estella had fed regularly during the night, that she had stooled three times, and that she appeared to be less jaundiced. Dr. Daub instructed Emily to return to the Clinic for a further follow-up in two day's time, but to contact him immediately if Estella's condition changed.

²⁹Dr. Daub took immediate and appropriate steps when on March 3, 2000, he recognized that Estella's condition had deteriorated. "Medical malpractice cases often turn into battles between dueling experts, and this case followed that well-worn path." Crowe v. Marchand, 506 F.3d 13, 16 (1st Cir. 2007). In assessing the point of onset of Estella's dehydration, the Calhouns rely principally on Dr. Wust-Smith, a pediatrician associated with Charles Cole Memorial Hospital in Coudersport, Pennsylvania. The government relies on Dr. Ringer, the Chief of Newborn Medicine at Brigham and Women's Hospital in Boston. It being a given that Estella's weight was not taken properly on February 29, 2000, there is no indication in the medical records and the testimony that Estella's weight had dropped dangerously between February 29 and March 1, the days on which she was initially evaluated by Dr. Daub. The court credits Dr. Ringer's opinion that if Estella had in fact been experiencing excessive weight loss on or prior to March 1, 2000, her physical appearance and condition would have been markedly different. She would not have been feeding well, she would not have been stooling, her jaundice would have been more acute, and her skin would have been looser than it was observed to be.

inaccurate weighing by Airman Best was not a contributing cause of Estella's dehydration or her subsequent cerebrovascular complications. See Primus v. Galgano, 329 F.3d 236, 241 (1st Cir. 2003).³⁰

9. Therefore, the deviation by Dr. Daub could not have contributed to Estella's behavioral and cognitive dysfunctions, including her ADHD, as they later developed.

10. Consequently, Dr. Daub cannot be found liable, nor by extension can the United States.

ORDER

For the foregoing reasons, the Clerk will enter judgment for the defendant United States of America. The case will then be closed.

SO ORDERED.

/s/ Richard G. Stearns

UNITED STATES DISTRICT JUDGE

³⁰Plaintiffs offer a March 14, 2000 letter written by Captain Calhoun to Col. Charles Armstead, the Commander of the medical group to which the Hanscom Clinic was attached. In the letter, Captain Calhoun relates a conversation in which Dr. Coleman is alleged to have stated that "Estella's dehydration could certainly have been avoided if her in-processing procedures were being conducted correctly for each of her visits at the Hanscom Clinic." The letter was offered as an admission of liability by the United States. While the court accepted the letter de bene it clearly is inadmissible as hearsay (on several levels).